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EXAMINER

DINH, KHANH Q

ART UNIT PAPER NUMBER

2151

DATE MAILED: 05/06/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/556,279	HASHA ET AL.	
	Examiner	Art Unit	
	Khanh Dinh	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,10,12-33,36-42,44,46 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,10,12-33,36-42,44,46 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the Amendment and Request for Reconsideration filed on 3/19/2004 (paper # 12). Claims 9, 11, 34, 35, 43 and 45 are canceled. Claims 1-8, 10, 12-33, 36-42, 44, 46 and 47 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-8, 12-20, 26-33, 36-42, 44, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maggenti et al. in view of Christy, US pat. No.6,725,264.

As to claim 1, Maggenti discloses a method of implementing a network of devices (202, 204 and 206 fig.2) connected to a shared media (Mobile Switching Center 220 fig.2), the devices being a part of a consumer electronic appliance, the method comprising:

forming a logical network (communications groups) on the shared media, the logical network including an address space arbiter (ASA) (Communications Manager CM 218 fig.2) coupled to the shared media (see abstract, figs.1, 2, col.4 line 48 to col.5 line 55 and col.17 lines 8-45).

discovering the device coupled to the shared medium by communication between the ASA and the device, acquiring the discovered device being a member of the logical network (using CM to maintain and distribute request arbitrations and updates registration list, see col.5 line 38 to col.6 line 61, col.7 line 31 to col.8 line 67 and col.11 lines 5-42).

receiving a message from the device (using CD 202 fig.2 determine if it can join NET based on Session Initiation Protocol) over the shared media and comparing information associated with the device included in the message to information associated with devices in an acquired device table (list of current NET available for the CD), the acquired device table being arranged to include information associated with devices that are members of the logical network (see col.11 line 43 to col.12 line 64 and col.13 lines 12-62).

Maggenti does not specifically disclose adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table including information associated with discovered but unacquired devices. However, Christy discloses adding information associated with the device (information of a member device with a cluster) to an announced device table if

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the information is not stored in the acquired device table (SNMP Manager Operations table) and the device is unacquired, wherein the announced device table including information associated with discovered but unacquired devices (allowing a commander to act as SNMP proxy for the entire network cluster when a network device join a cluster, see fig.s3A, 3B, col.6 line 40 to col.7 line 42 and col.11 lines 2-57). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Christy's teachings into the computer system of Maggenti to monitor network devices because it would have enabled network management to exchange information to appropriate cluster devices and provided a consistent, device-independent interface between devices in the cluster network (see Christy's col.3 lines 9-32).

As to claim 2, Maggenti discloses detecting and removing inactive devices from the logical network (removing an inactive Communication device, see col.11 line 44 to col.12 line 64 and col.13 lines 34-62). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to utilize Maggenti's teaching into the computer system of Christy to control communication devices in a cluster network because it would have

As to claim 3, Maggenti discloses acquiring the discovered device by operation of an acquisition authority (AA) (i.e., using CM to grant or deny requests from users, see col.13 line 12 to col.14 line 67 and col.15 lines 5-62).

As to claim 4, Maggenti discloses adding a plurality of devices to the logical network, the plurality of devices being coupled to the shared media and configured to send and receive messages over the shared media, the plurality of devices being responsive to messages sent over the shared media that are addressed to the logical network (using MCU to control exchange information between CDs, see also fig.6 and col.15 line 4 to col.16 line 63).

As to claim 5, Maggenti discloses forming a second logical network on the shared media by operation of a second ASA, members of the second logical network being configured to respond to messages carried on the shared media addressed to the second logical network and not to respond to messages carried on the shared media that are addressed to the logical network (i.e., providing a second administrative interface, see col.8 line 11 to col.9 line 14).

As to claim 6, Maggenti discloses shared media comprises a power-line of a building (see figs 3, 4 and col.9 line 15 to col.10 line 55).

As to claim 7, Maggenti discloses selecting an m number by operation of the ASA, broadcasting a message addressed to a logical network having the selected ID number as its logical network ID, monitoring the shared media for a response to the broadcasted message and adopting the selected m number as the logical network ID (monitoring data packets transfer from members using user IDs or network addresses, see col.10 line 20 to col.11 line 11 and col.17 line 7 to col.18 line 48).

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As to claim 8, Maggenti discloses receiving a message from the device in the ASA and determining whether the device is unacquired devices (using information stored in the Net database to track activities of individual users, see col.17 line 7 to col.18 line 60).

As to claims 16 and 17, Maggenti discloses a process of an executing computer program, comparing elapsed time since the device last transmitted a message over the shared media to a predetermined maximum inactive time limit and removing the device from the logical network if the elapsed time exceeds the maximum inactive time limit (determine if a Net is inactive for a predetermined time period and removing a CD from a NET, see col.12 lines 16-44, col.13 line 12 to col.13 line 67 and col.16 lines 3-56).

As to claims 18-20, Maggenti discloses that before removing the device from the logical network, sending a message to the device and monitoring the shared media for a valid message (response) from the device that is responsive to the message, resetting the elapsed time if the device provides a valid responsive message within a predetermined time period; the device is configurable to set the maximum inactive time limit by sending a message to the ASA that includes a value for the maximum inactive time limit and a table that configured to store the elapsed time and the maximum inactive time period (determine if a Net is inactive for a predetermined time period and removing a CD from a NET, see col.12 lines 16-44, col.13 line 12 to col.13 line 67 and col.16 lines 3-56).

As to claim 26, Maggenti discloses a system for supporting communication between devices connected to a shared media, the devices being a part of a consumer electronic appliance, the system comprising:

a device (202 fig.2) coupled to the shared media (220 fig.2), wherein the device is configured to send and receive messages over the shared media (see abstract, col.7 line 58 to col.8 line 44).

an address space arbiter (ASA) (Communication Manager CM 218 fig.2) coupled to the shared media, the ASA being configurable to form a logical network with zero or more devices connected to the shared media ID (see figs.1, 2, col.4 line 48 to col.5 line 55 and col.17 lines 8-45).

and an acquisition authority (AA) (228 fig.2) at least intermittently coupled to the ASA, wherein the AA is configured to selectively authorize the ASA to add a device to the logical network, wherein the logical network has a logical network ID (user ID), the ASA and any devices of the logical network are configured to be responsive to messages sent over the shared media that are addressed to the logical network media (using CM to maintain and distribute request arbitrations and registration list, see col.5 line 38 to col.6 line 61, col.7 line 31 to col.8 line 67 and col.39 line 10 to col.40 line 65).

receiving a message from the device (using CD 202 fig.2 determine if it can join NET based on Session Initiation Protocol) over the shared media and comparing information associated with the device included in the message to information associated with devices in an acquired device table (list of current NET available for the CD), the acquired device table being arranged

to include information associated with devices that are members of the logical network (see col.11 line 43 to col.12 line 64 and ol.13 lines 12-62).

Maggenti does not specifically disclose adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table including information associated with discovered but unacquired devices. However, Christy discloses adding information associated with the device (information of a member device with a cluster) to an announced device table if the information is not stored in the acquired device table (SNMP Manager Operations table) and the device is unacquired, wherein the announced device table including information associated with discovered but unacquired devices (allowing a commander to act as SNMP proxy for the entire network cluster when a network device join a cluster, see fig.s3A, 3B, col.6 line 40 to col.7 line 42 and col.11 lines 2-57). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Christy's teachings into the computer system of Maggenti to monitor network devices because it would have enabled network management to exchange information to appropriate cluster devices and provided a consistent, device-independent interface between devices in the cluster network (see Christy's col.3 lines 9-32).

Claims 27, 29, 30, 33 and 36-38 are rejected for the same reasons set forth in claims 2, 5, 6-8, 10 and 19 respectively.

As to claims 28, 31 and 32, Maggenti discloses a process of an executing computer program, the ASA includes a control unit and the control unit is implemented with a computer system (see fig.2, col.4 line 26 to col.5 line 65 and col.32 line 53 to col.33 line 54).

As to claim 39, Maggenti discloses a method of implementing a network of devices (202, 204 and 206 fig.2) connected to a shared media (Mobile Switching Center 220 fig.2), the devices being a part of a consumer electronic appliance, the method comprising:

forming a logical network (communications groups) on the shared media, the logical network including an address space arbiter (ASA) (Communications Manager CM 218 fig.2) coupled to the shared media, the logical network having a logical network ID (network ID) (see abstract, figs.1, 2, col.4 line 48 to col.5 line 55 and col.17 lines 8-45).

Adding a device to the logical network (using CM to maintain and distribute request arbitrations and updates registration list, see col.5 line 38 to col.6 line 61, col.7 line 31 to col.8 line 67 and col.11 lines 5-42).

receiving a message from the device (using CD 202 fig.2 determine if it can join NET based on Session Initiation Protocol) over the shared media and comparing information associated with the device included in the message to information associated with devices in an acquired device table (list of current NET available for the associated with devices in an acquired device table (list of current NET available for the CD), the acquired device table being arranged to include information associated with devices that are members of the logical network (see col.11 line 43 to col.12 line 64 and col.13 lines 12-62).

Maggenti does not specifically disclose adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table including information associated with discovered but unacquired devices. However, Christy discloses adding information associated with the device (information of a member device with a cluster) to an announced device table if the information is not stored in the acquired device table (SNMP Manager Operations table) and the device is unacquired, wherein the announced device table including information associated with discovered but unacquired devices (allowing a commander to act as SNMP proxy for the entire network cluster when a network device join a cluster, see fig.s3A, 3B, col.6 line 40 to col.7 line 42 and col.11 lines 2-57). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Christy's teachings into the computer system of Maggenti to monitor network devices because it would have enabled network management to exchange information to appropriate cluster devices and provided a consistent, device-independent interface between devices in the cluster network (see Christy's col.3 lines 9-32).

Claims 40, 41, 42 and 44 are rejected for the same reasons set forth in claims 3 and 7, 8 and 10 respectively.

Claims 46 and 47 are rejected for the same reasons set forth in claims 39 and 40 respectively.

4. Claims 10 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maggenti and Christy as in item 3 above and further in view of Vert et al., US pat. No.6,360,331.

As to claims 21, Maggenti discloses a method of communication between devices on a shared media, the shared media being configurable to support communication within one or more logical networks (NETs), each logical network having a logical network ID and each device having a globally unique identifier, a logical network identifier, and a logical device identifier, the method comprising:

coupling a sending device and a receiving device on the shared media (202, 204, 210 fig.2) formatting a message for transmission on the shared media (Communication Manager CM 218 fig.2) (see fig.2, line 5 to col.6 line 61) from the sending device to the receiving device, wherein the message includes:

a source logical network ID (source identity) field configurable to contain the logical network ID of the logical network of which the sending device is a member (see fig.13, col.31 line 38 to col.32 line 53 and col.43 line 17 to col.44 line 65).

a source device ID field (sender ID 1200 fig.13) configurable to contain the logical device identifier, a destination logical network ID field configurable to contain the logical network ID of which the receiving device is a member (see figs.2, 13, abstract, col.32 line 53 to col.33 line 54 and col.34 line 45 to col.35 line 46).

a destination device ID field configurable to contain the logical device ID of the receiving device, a message type field configurable to contain a code indicative of information contained in the message and a message data field configurable to contain data; and transmitting

the message from the sending device to the receiving device over the shared media (using CM to maintain and distribute request arbitrations and registration list, see fig.13, col.5 line 38 to col.6 line 61, col.7 line 31 to col.8 line 67 and col.39 line 10 to col.40 line 65).

comparing information associate with the device included in the message to information associated with devices in an acquired device table (list of current NETs available for the CD) (see col.11 line 43 to col.12 line 64 and ol.13 lines 12-62).

Maggenti does not specifically disclose adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table including information associated with discovered but unacquired devices. However, Christy discloses adding information associated with the device (information of a member device with a cluster) to an announced device table if the information is not stored in the acquired device table (SNMP Manager Operations table) and the device is unacquired, wherein the announced device table including information associated with discovered but unacquired devices (allowing a commander to act as SNMP proxy for the entire network cluster when a network device join a cluster, see fig.s3A, 3B, col.6 line 40 to col.7 line 42 and col.11 lines 2-57). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Christy's teachings into the computer system of Maggenti to monitor network devices because it would have enabled network management to exchange information to appropriate cluster devices and provided a consistent, device-independent interface between devices in the cluster network (see Christy's col.3 lines 9-32).

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Maggenti further discloses assigning a logical device identifier to the device and assigning the logical network ID as a logical network identifier to the device (see col.17 line 7 to col.18 line 49). Maggenti does not disclose adding globally unique identifier to acquired device table.

However, Vert discloses adding the globally unique identifier to acquired device table, removing the device's logical device identifier and globally unique identifier from the announced device table (see col.11 line 10 to col.12 line 57 and col.13 lines 15-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Vert's teachings into the computer system of Maggenti to register configuration data because it would have rapidly obtained the application configuration information and ensured a speedy transparent fail-over operation.

As to claim 10, Maggenti further discloses assigning a logical device identifier to the device and assigning the logical network ID as a logical network identifier to the device (see col.17 line 7 to col.18 line 49). Maggenti does not disclose adding globally unique identifier to acquired device table. However, Vert discloses adding the globally unique identifier to acquired device table, removing the device's logical device identifier and globally unique identifier from the announced device table (see col.11 line 10 to col.12 line 57 and col.13 lines 15-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Vert's teachings into the computer system of Maggenti to register configuration data because it would have rapidly obtained the application configuration information and ensured a speedy transparent fail-over operation.

As to claims 22, Maggenti discloses that the destination logical network ID field is configurable to contain a code representing all logical networks on the shared media network (see fig.6 and col.15 line 4 to col.16 line 63).

As to claims 23, Maggenti discloses that destination device ID field is configurable to contain a code representing all devices of the logical network indicated in the destination logical network ID field (see col.32 line 53 to col.33 line 54 and col.34 line 45 to col.35 line 46).

As to claims 24, Maggenti discloses that the source device ID field is configurable to contain a code representing that the sending device has no logical device ID (see col.32 line 53 to col.33 line 54 and col.34 line 45 to col.35 line 46).

As to claims 25, Maggenti discloses the source logical network m field is configurable to contain a code representing that the sending device is not a member of a logical network (using information stored in the Net database, see col.17 line 7 to col.18 line 60).

Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Zombek et al, US pat. No.6,704,768.
- b. Miriyala, US pat. No.6,618,377.
- c. Natanson et al, US pat. No.6,643,289

Response to Arguments

6. Applicant's arguments with respect to claims 1-8, 10, 12-33, 36-42, 44, 46 and 47 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Claims 1-8, 10, 12-33, 36-42, 44, 46 and 47 are *rejected*.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (703) 308-8528. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess, can be reached on (703) 305-4792. The fax phone number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305 -9600.



Khanh Dinh
Patent Examiner
Art Unit 2151
5/2/2004